U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Crawford Former Power Plant - Removal Polrep Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region V

Subject: POLREP #2

Final

Crawford Former Power Plant

C5M1

Chicago, IL

Latitude: 41.8285450 Longitude: -87.7220310

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Date: 2/26/2013

Reporting Period: 12/7/2012 - 2/26/2013

1. Introduction

1.1 Background

Site Number: C5M1 Contract Number:

D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type:

Response Lead: EPA Incident Category: Removal Assessment

NPL Status: Non NPL Operable Unit: Mobilization Date: 12/3/2012 Start Date:

Demob Date: 12/5/2012 **Completion Date:** 12/5/2012

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification: Illinois EPA

FPN#: Reimbursable Account #:

1.1.1 Incident Category

Removal Site Assessment

1.1.2 Site Description

The Site occupies approximately 72 acres and is developed with buildings and infrastructure associated with the Midwest Generation, LLC Crawford Generating Station, a coal-fired electric power generation plant. The plant ceased electricity generation operations in August 2012.

1.1.2.1 Location

The Crawford Generating Station (the 'Site') is located at 3501 South Pulaski Road in Chicago, Illinois. The Site is bordered to the north by West Cougar Street; to the east by South Hamlin Avenue; to the south by the Chicago Sanitary & Ship Canal; and to the west by South Pulaski Road. Residential properties are located approximately 105 feet north and 2,000 feet southeast of the Site.

1.1.2.2 Description of Threat

Though the plant ceased operations in August 2012, local residents and community organizations expressed concerns to EPA over environmental impacts from the Site. In a letter dated September 18, 2012, Chicago Legal Clinic, Inc., legal counsel on behalf of the Pilsen Environmental Rights and Reform Organization (PERRO) and the Little Village Environmental Justice Organization (LVEJO), outlined concerns about environmental impacts from the Site. A copy of this letter can be found in the 'documents' section of the website.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On September 21, 2012, EPA issued information requests regarding the Site to both Midwest Generation, LLC and ComEd. The document requested reports or documents regarding any investigation and/or sampling of the soil, subsurface soil, groundwater, or air on the Site or off the Site (from potential or actual releases). Numerous documents were submitted by both Midwest Generation, LLC and ComEd relating to the site and were subsequently reviewed by EPA. A list of all documents submitted can be found in the 'documents' section of the website.

A work plan was developed in coordination with community organizations and local/state/federal health & environmental agencies to conduct perimeter particulate air monitoring and off-site gamma radiation screening to address specific ambient air concerns raised by the community which might be associated with the Site. A copy of the work plan can be found in the 'documents' section of the website.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The main activity implemented pursuant to the assessment included development and implementation of a work plan to address concerns regarding potential dust and gamma radiation impacts to the public from the Site.

2.1.2 Response Actions to Date

All data collected from both the stationary/mobile perimeter air monitors and weather stations on December 3 & 5, 2012 was mapped and evaluated. Data from radiation screening conducted in surrounding neighborhoods on December 7, 2012 was processed, mapped and statistically analyzed. The data tables, maps, graphs and figures showing the results can be found in a 'Letter Report' posted on the 'documents' section of the website. In addition, all data points collected can be viewed on EPA's Flexviewer data mapping site at https://r5imt.net/pilsen/.

Highlights of the particulate data are found in the following table:

Date	Time	Weather	Wind Direction (from)	Highest Hourly Avg (ug/m3)	Monitor	Location
Dec 3	10am - 6pm	windy / warm	SSW	69.2	3	Chicago River (S)
Dec 5	9am - 5pm	calm / cold	ENE	10.5	2	Parking lot (W)

The four stationary DataRAM 4 monitors were equipped to measure "PM-10" total suspended particulate matter, which is less than or equal to 10 micrometers (0.0004 inches or one-seventh the width of a human hair) in size. This is the dust particle size most commonly associated with this type of site. PM-10 readings on both days were found to be well under **EPA's health-based air quality standard of 150 ug/m3**, which is measured as a daily concentration. PM-10 levels were also found to be in line or under levels typically found in particulate monitors in the Chicago region operated within EPA's nationwide network of monitoring sites.

A summary of the radiation screening data is found in the following table:

A	Number of	Median Value	Maximum Reading	
Area	Readings Taken	(uSv/hr)	(uSv/hr)	
Crawford Neighborhoods	11984	0.0935	0.34	
Wicker Park	2842	0.09	0.48	
Lincoln Park	2704	0.09	0.73	
Irving Park	2691	0.09	0.34	
Andersonville	2838	0.10	0.39	

The Victoreen 451P pressurized ion chamber measured gamma radiation, which is the type of radiation targeted for

the survey due to the potential presence of naturally-occurring radioactive material in coal and coal combustion byproducts. **Typical gamma radiation dose rates range from 0.06 - 0.20 uSv/hr** due to terrestrial and cosmic sources of natural radiation. Radiation levels in neighborhoods surrounding the Site were compared to four other reference neighborhoods on the north side of Chicago (Lincoln Park, Irving Park, Andersonville & Wicker Park). Radiation levels were found to be at background levels expected to be found in urban areas and were comparable to the 'background' reference neighborhoods.

EPA provided an overview of field monitoring activities to community group representatives on December 13, 2012. All data was summarized and presented to partnering local/state/federal environmental and health agency representatives on January 31, 2013. The data and results were presented again on February 6, 2013 to community group representatives. A meeting was held to discuss documents submitted to EPA pursuant to the information request on February 11, 2013. During these meetings, EPA answered questions and discussed and solicited feedback on strategies for dissemination of monitoring results to residents in the broader community.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The owner of the Site is Midwest Generation, LLC. Midwest Generation, LLC responded to an information request issued by EPA by providing responsive documents on October 3, 2012. In addition, Midwest Generation, LLC signed a Consent For Access to Property on November 30, 2012 allowing EPA to access the Site perimeter to conduct the particulate air monitoring.

2.1.4 Progress Metrics

R5 Priorities Summary				
	Miles of river systems cleaned and/or restored			
This is an Integrated River Assessment.	Cubic yards of contaminated sediments removed and/or capped			
The numbers should overlap.	Gallons of oil/water recovered			
	Acres of soil/sediment cleaned up in floodplains and riverbanks	N/A		
	Acres Protected	N/A		
Stand Alone	Number of contaminated residential yards cleaned up	N/A		
Assessment	Human Health Exposures Avoided	91,000		
	Number of workers on site	5		
Contaminant(s) of Concern				
Contaminant(s) of Concern	Particulate (PM-10)			

2.2 Planning Section

2.2.1 Anticipated Activities

A final fact sheet in both English and Spanish will be distributed in the community. A community availability session will be held during a 'Science Night' event scheduled for March 21 at 5:00pm at the Little Village Lawndale High School (3120 S. Kostner) in coordination with the City of Chicago and LVEJO. Results from the particulate monitoring and radiation screening will be shared and EPA staff will be available to answer questions on the Site as well as other removal actions currently being planned or underway in the neighborhood.

2.2.1.1 Planned Response Activities

See Section 2.2.1.

2.2.1.2 Next Steps

None

2.2.2 Issues

None

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

See Table.

Estimated Costs *

Latimated Costs							
	Budgeted	Total To Date	Remaining	% Remaining			
Extramural Costs							
TAT/START	\$25,000.00	\$14,190.00	\$10,810.00	43.24%			
Intramural Costs							
USEPA - Direct	\$0.00	\$25,000.00	(\$25,000.00)	0.00%			
Total Site Costs	\$25,000.00	\$39,190.00	(\$14,190.00)	-56.76%			

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Paul Ruesch served as safety officer for all field activities.

2.5.2 Liaison Officer

OSC Paul Ruesch served as liaison officer with Midwest Generation, LLC, participating local/state/federal agencies, and interested citizens.

2.5.3 Information Officer

Heriberto Leon served as the Community Involvement Coordinator for this project. Preliminary and final Fact Sheets in both English and Spanish were developed and distributed prior to field activities in coordination with community group representatives. The Fact Sheets, photographs, maps, diagrams and project updates are found at the following website: http://www.epa.gov/Region5/cleanup/crawfordfisk/index.html.

3. Participating Entities

3.1 Unified Command

N/A

3.2 Cooperating Agencies

Illinois Environmental Protection Agency

Illinois Department of Public Health

Chicago Department of Public Health

Chicago Department of Fleet & Facility Management - Bureau of Environmental, Health and Safety Management Agency for Toxic Substances and Disease Registry

4. Personnel On Site

No information available at this time.

5. Definition of Terms

PM-10 - particulate matter less than or equal to 10 micrometers in size

ug/m3 - micrograms per cubic meter - unit of measure for particulate concentration uSV/hr - microSievert per hour - unit of measure for radiation dose rate per hour Sievert - international system unit for equivalent radiation dose (1 Sievert = 100 rem)

6. Additional sources of information

6.1 Internet location of additional information/report

https://r5imt.net/pilsen

http://www.epaosc.org/fiskpowerplant

http://www.epa.gov/Region5/cleanup/crawfordfisk/index.html

http://epa.gov/region5/littlevillagepilsen/

6.2 Reporting Schedule

No further reporting is anticipated.

7. Situational Reference Materials

No information available at this time.